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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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*Ex parte* RICHARD J TITMUSS, CAROLINE AM LEBRE, and  
JAMES L TAYLOR

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Appeal 2009-000930  
Application 09/868,221  
Technology Center 2400

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Decided: December 16, 2009

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Before LANCE LEONARD BARRY, HOWARD B. BLANKENSHIP, and  
JEAN R. HOMERE, *Administrative Patent Judges*.

BARRY, *Administrative Patent Judge*.

DECISION ON APPEAL

## STATEMENT OF THE CASE

The Patent Examiner rejected claims 1-7, 9, 10, 15, and 17-20. The Appellants appeal therefrom under 35 U.S.C. § 134(a). We have jurisdiction under 35 U.S.C. § 6(b).

## INVENTION

The invention at issue on appeal routes data to a mobile terminals. (Spec. 1.) More specifically, the routing is performed by a home agent rather than a mobile terminal. (*Id.* at 2.)

## ILLUSTRATIVE CLAIM

1. A method of transmitting one or more data streams to a mobile terminal configured for simultaneous communication via a plurality of types of wireless networks, the method comprising:

(i) sending the one or more data streams from a correspondent host to a home agent located in the home network of the mobile terminal, the mobile terminal sending a request for a data stream to be transmitted by the correspondent host and the mobile terminal communicating with the home agent to transmit a network location of the mobile terminal to the home agent; and

(ii) forwarding the one or more data streams to the mobile terminal,

wherein the mobile terminal sends to the home agent information about the types of networks to which the mobile terminal is currently connected, the available bandwidth for each type of network to which the mobile terminal is currently connected, and the mobile host's care-of address applicable for each type of network to which the mobile terminal is currently

connected, the home agent selecting an appropriate network and its applicable care-of address based on the available bandwidth for each type of network to which the mobile terminal is currently connected.

#### PRIOR ART

Kikinis	US 6,553,410 B2	Apr. 22, 2003
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Zhao et al., *Flexible Network Support for Mobility*, Proc. Fourth Annual ACM/IEEE Int'l Conference on Mobile Computing and Networking, 145-56 (1998) (hereinafter "Zhao").

#### REJECTIONS

Claims 1-5, 9, 10, 15, and 17-20 stand rejected under 35 U.S.C. § 102(a) as anticipated by Zhao.

Claims 6 and 7 stand rejected under 35 U.S.C. §103(a) as obvious over Zhao and Kikinis.

#### ISSUE

The Examiner finds that "Zhao disclosed selection of a network among several networks by the home agent (see Fig. 5), the selection made 'by the home agent in determining the most appropriate interfaces through which to forward packets addressed to a mobile host' (see Section 8)." (Ans. 9.) He further finds that "the ability of the mobility-aware applications (i.e., mobile terminals) to specify QoS [i.e., quality of service] requirements would include a provision to send the home agent information about the bandwidth of the networks it is connected to since QoS involved bandwidth

considerations (see section 5.1[.2])." (*Id.*) The Appellants argue that "the Examiner[ ] . . . combines two teachings of Zhao which address different scenarios." (Reply Br. 4) Therefore, the issue before us is whether the Appellants have shown error in the Examiner's finding that Zhao discloses a home agent selecting a network based on the available bandwidth for each type of network to which a mobile terminal is connected.

## LAW

"[A]n invention is anticipated if the same device, including all the claim limitations, is shown in a single prior art reference. Every element of the claimed invention must be literally present, arranged as in the claim." *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236 (Fed.Cir. 1989) (citing *Perkin-Elmer Corp. v. Computervision Corp.*, 732 F.2d 888, 894 (Fed. Cir. 1984); *Kalman v. Kimberly-Clark Corp.*, 713 F.2d 760, 771-72 (Fed. Cir. 1983)). "[A]bsence from the reference of any claimed element negates anticipation." *Kloster Speedsteel AB v. Crucible, Inc.*, 793 F.2d 1565, 1571 (Fed. Cir. 1986).

## FINDINGS OF FACT (FF(s))

### 1. Section 8.3 of Zhao follows.

IPv6 provides a *priority* (class) field that is used by routers to provide different services to different types of packets. This field can potentially be used in our proposal by the home agent in determining the most appropriate interfaces through which to forward packets addressed to a mobile host *in the absence of Flow-to-Interface binding registrations* (second emphasis added).  
(p. 154.)

2. The same reference's "Figure 5 illustrates the routing of datagrams to and from a mobile host away from home, *once the mobile host has registered some Flow-to-Interface bindings* with its home agent (emphasis added)." (*Id.* at 151.)

3. Section 5.1.2 of Zhao follows in pertinent part.

Quality of service (QoS): The different networks to which a user has access may offer different QoS guarantees. For example, a mobile user may have simultaneous access to a GSM network [29] that has low bandwidth but relatively low latency, as well as to a Metricom network [19] that offers higher bandwidth but has higher and more variable latency. *The mobile host might decide* to use the GSM network for its low-bandwidth interactive flows, such as its voice or telnet traffic, which require low latency for user satisfaction, but to use the Metricom network for its bulk data transfer flows, such as ftp traffic, which require high bandwidth but do not demand as low a latency (emphasis added).

(*Id.* at 150.)

## ANALYSIS

Although the Examiner rejects claims 1-5, 9, 10, 15, and 17-20 as anticipated by Zhao, we agree with the Appellants that "the Examiner[ ] . . . combines two teachings of [the reference] which address different scenarios." (Reply Br. 4.) Specifically, Section 8.3 of Zhao discloses a home agent selecting a network in the absence of Flow-to-Interface binding registrations (FF 1), while the same reference's Figure 5 illustrates the routing of datagrams in the presence of Flow-to-Interface binding registrations (FF 2). Because the Examiner proposes to combine teachings

that address different scenarios, he has not shown that the claimed invention is found in the same device.

For its part, Section 5.1.2 of Zhao discloses that different networks to which a user has access may feature different bandwidths and such networks may be selected based on the need for bandwidth. (FF 3.) We agree with the Appellants that in this Section, however, "it is the mobile host, not the home agent, which selects which network to use." (Reply Br. 2.) Therefore, Section 5.1.2 fails to disclose every element of the claimed invention, arranged as in the claims.

The absence of a home agent selecting a network based on the available bandwidth for each type of network to which a mobile terminal is connected negates anticipation. Furthermore, the Examiner does not allege, let alone show, that the addition of Kikinis cures the aforementioned deficiency of Zhao.

### CONCLUSION

Based on the aforementioned facts and analysis, we conclude that the Appellants have shown error in the Examiner's finding that Zhao discloses a home agent selecting a network based on the available bandwidth for each type of network to which a mobile terminal is connected.

### DECISION

We reverse the rejections of claims 1-7, 9, 10, 15, and 17-20.

Appeal 2009-000930  
Application 09/868,221

REVERSED

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